



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,017	01/23/2007	Chunlin Tao	252900	4760

23460 7590 01/09/2008  
LEYDIG VOIT & MAYER, LTD  
TWO PRUDENTIAL PLAZA, SUITE 4900  
180 NORTH STETSON AVENUE  
CHICAGO, IL 60601-6731

EXAMINER
----------

WITHERSPOON, SIKARL A

ART UNIT	PAPER NUMBER
----------	--------------

1621

MAIL DATE	DELIVERY MODE
-----------	---------------

01/09/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/584,017	<b>Applicant(s)</b> TAO ET AL.	
	<b>Examiner</b> Sikar A. Witherspoon	<b>Art Unit</b> 1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 47-89 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 47-70 and 78-89 is/are rejected.
- 7) ☒ Claim(s) 71-77 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/22/06, 11/1/07</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 48, 50, 52, 57, 59, 61, and 78 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 48, 50, 52, 57, 59, and 61 recite that substituent R<sub>2</sub> is hydrogen; however, according to claim 47 from which the instant claims depend, R<sub>2</sub> is an alkyl group; thus the instant claims are found indefinite.

Claim 78 recites a process for preparing a compound of claim 47; however, the process steps recited will form a compound of claim 47 wherein X is C=O. The compound of claim 47 is a genus that encompasses many different compounds and classes of compounds. Accordingly, the instant claim is indefinite for failing to describe a particular species, or subgenus made by the claimed process.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 47 is rejected under 35 U.S.C. 102(a) as being anticipated by the compound disclosed in the reference XP-002449569.

Claim 47 is rejected under 35 U.S.C. 102(b) as being anticipated by the compound disclosed in reference XP-002449571.

Claims 47 and 69 are rejected under 35 U.S.C. 102(b) as being anticipated by the compound disclosed in reference XP-002449564.

Claim 47 is rejected under 35 U.S.C. 102(b) as being anticipated by the compound disclosed in reference XP-002449570.

Claims 47 and 69 are rejected under 35 U.S.C. 102(b) as being anticipated by the compound disclosed in reference XP-002449568.

Claims 47 and 69 are rejected under 35 U.S.C. 102(b) as being anticipated by the compound disclosed in reference XP-002449567.

Claims 47, 48, 56, 65, 66, 69, 70, 78, and 79 are rejected under 35 U.S.C. 102(b) as being anticipated by Riebel et al (US 3,215,530).

The compounds disclosed at column 2, lines 15-31, and the process disclosed at column 3, lines 44-60, anticipate the instant claims.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 49, 51, 53-55, 58, 60, and 62-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riebel et al.

The instant claims are drawn to limitations that recite compounds that are not disclosed by Riebel et al; however, the compounds described the instant claims would be closely homologous compounds, differing at substituents R2 and R3 by 1 or 2 carbon atoms. The instant claims are therefore found obvious because it would have been obvious to a person having ordinary skill in the art to make such compounds, given the compounds that are disclosed by Riebel et al, with the reasonable expectation of providing more compounds that have the desired anti-fading properties taught by Riebel et al.

Claims 80-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trapani et al (Current Medicinal Chemistry, 2000) in view of Riebel et al.

The instant claims are drawn to pharmaceutical compositions comprising the compounds of the present invention and to methods of using said compound(s) or compositions.

Trapani et al teach the use of Propofol (2,6-diisopropylphenol) and certain derivatives as an anesthetic. The derivatives recited by the instant claims are not specifically taught by Trapani et al; however, as taught by Riebel et al, albeit for a different use, compounds that are considered derivatives of Propofol are known. It therefore would have been obvious to a person having ordinary skill in the art that the compounds taught by Riebel et al, as Propofol derivatives, would have utility in anesthetic and sedation inducing formulations.

Claims 71-77 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Claim Objections***

Claims 65-68 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to another claim in the alternative only, and should not depend from another multiple dependent claim. See MPEP § 608.01(n).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikarl A. Witherspoon whose telephone number is 571-272-0649. The examiner can normally be reached on M-F 8:30-6:30.

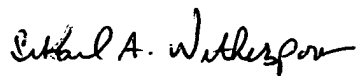
Application/Control Number:  
10/584,017  
Art Unit: 1621

Page 6

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached on 571-272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

saw

  
SIKARL A. WITHERSPOON  
PRIMARY EXAMINER